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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BRIARCLIFF MANOR, NY 10510				
EXAMINER				
SHEDRICK, CHARLES TERRELL				
ART UNIT		PAPER NUMBER		
2617				
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05/14/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/566,513

**Applicant(s)**

NANDAGOPALAN, SAI SHANKAR

**Examiner**

CHARLES SHEDRICK

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF 298)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 is objected to because of the following informalities: Wireless 46 C should read Wireless station 22C instead. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1-22** are rejected under 35 U.S.C. 102(b) as being anticipated by Cimini et al. US Patent Pub. No. 2003/0133427 A1, hereinafter, “Cimini”.

Consider **claim 1**, Cimini teaches a method (100) for providing bandwidth fairness in wireless networks (e.g., **see paragraphs 0047 and 0049**), comprising: receiving a set of packets (46C) on an access point (20) for a wireless station (46C) (e.g., **paragraph 0045**); setting a more fragment bit of the set of packets (46C)(e.g., **paragraphs 0028 and 0029**); and transmitting successive packets of the set of packets from the access point (20) to the wireless station (46C) without back-off(e.g., **see paragraphs 0060-0062**).

Consider **claims 5, 11 and 17**, Cimini teaches an Access point, a program product stored on a recordable medium, and a method (200) for providing bandwidth and airtime fairness in wireless networks (e.g., **paragraphs 0047 and 0049**), comprising: receiving a packet (34) on an access point (20) for a wireless station (22A)(e.g., **see paragraph 0045**); calculating an airtime requirement for transmitting the packet (34) to the wireless station (22A)(e.g., **see paragraphs**

**005-0054**); setting a time counter (50) on the access point (20) based on the airtime requirement(e.g., see **paragraphs 0056-0058**); and determining whether the packet (34) can be transmitted before the time counter (50) expires(e.g., see **paragraphs 0057 and figure 10**).

Consider **claim 2 and as applied to claim 1**, Cimini teaches wherein the step of setting the more fragment bit, comprises setting the more fragment bit in a MAC header accompanying the set of packets (46C) to a value of 1 (e.g., see **paragraph 0060 which is inherent based on the determination of one or more fragments**).

Consider **claim 3 and as applied to claim 1**, Cimini teaches wherein the set of packets (46C) comprises a plurality of packets (e.g., see **paragraph 0045**).

Consider **claim 4 and as applied to claim 1**, Cimini teaches wherein the more fragment bit is not set in a last of the set of packets (46C) to be transmitted(e.g., see **paragraph 0060 which is inherent based on the determination of one or more fragments**).

Consider **claim 6 and as applied to claim 5**, Cimini teaches the claimed invention further comprising transmitting the packet to the access point (e.g., see **figure 12A and paragraph 0062-0063**).

Consider **claim 7 and as applied to claim 5**, Cimini teaches the claimed invention further comprising splitting the packet (34) into a set of fragments (48) if the packet (34) cannot be transmitted before the time counter (50) expires (e.g., see **paragraphs 0057 and 0060**).

Consider **claim 8 and as applied to claim 7**, Cimini teaches the claimed invention further comprising transmitting the set of fragments (48) until the time counter (50) expires (e.g., see **paragraphs 0057 and 0060**).

Consider **claim 9 and as applied to claim 7**, Cimini teaches wherein the splitting step

comprises splitting the packet (34) into equal sub-packets to yield a set of fragments (48) (e.g., **see paragraphs 0057 and 0060**).

Consider **claim 10 and as applied to claim 5**, Cimini teaches wherein the airtime requirement is calculated based on a size and a transmission rate of the packet (e.g., **see paragraphs 0057 and 0060**).

Consider **claim 12 and as applied to claim 11**, Cimini teaches the claimed invention further comprising means for communicating (32) the packet (34) if the packet (34) can be transmitted to the wireless station (22A) before the time counter (50) expires(e.g., **see figure 12A and paragraph 0062-0063**).

Consider **claim 13 and as applied to claim 11**, Cimini teaches the claimed invention further comprising means for splitting (40) the packet (34) into a set of fragments (48) if the packet (34) cannot be transmitted to the wireless station (22A) before the time counter (50) expires(e.g., **see paragraphs 0057 and 0060**).

Consider **claim 14 and as applied to claim 13**, Cimini teaches wherein the means for splitting (40) the packet (34) splits the packet (34) into equal sub-packets to yield the set of fragments (48) (e.g., **see paragraphs 0057 and 0060**).

Consider **claim 15 and as applied to claim 11**, Cimini teaches the airtime requirement is calculated based on a size and a transmission rate of the packet (34) (e.g., **see paragraphs 0057 and 0060**).

Consider **claim 16 and as applied to claim 11**, Cimini teaches wherein the access point (20) is a wireless access point (20) implemented within a wireless local area network (e.g., **see paragraph 0022**).

Consider **claim 18 and as applied to claim 17**, Cimini teaches the claimed invention further comprising program code for communicating (32) the packet (34) if the packet (34) can be transmitted to the wireless station (22A) before the time counter (50) expires(e.g., see **figure 12A and paragraph 0062-0063**)..

Consider **claim 19 and as applied to claim 17**, Cimini teaches the claimed invention further comprising program code for splitting (40) the packet (34) into a set of fragments (48) if the packet (34) cannot be transmitted to the wireless station (22A) before the time counter (50) expires(e.g., see **paragraphs 0057 and 0060**).

Consider **claim 20 and as applied to claim 19**, Cimini teaches wherein the program code for splitting (40) the packet (34) splits the packet (34) into equal sub-packets to yield the set of fragments (48) (e.g., see **paragraphs 0057 and 0060**).

Consider **claim 21 and as applied to claim 17**, Cimini teaches the airtime requirement is calculated based on a size and a transmission rate of the packet (34) (e.g., see **paragraphs 0057 and 0060**).

Consider **claim 22 and as applied to claim 17**, Cimini teaches wherein the program product (35) is implemented on an access point (20) that is implemented within a wireless local area network(e.g., see **paragraph 0022**).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES SHEDRICK whose telephone number is (571)272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harper Paul can be reached on (571)-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/  
Supervisory Patent Examiner, Art Unit 2617

/Charles Shedrick/  
Examiner, Art Unit 2617  
May 9, 2008